PATENT COOPERATION TREATY

PCT

TRANSLATION INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference JA900321	FOR FURTHER ACTION See Form PCT/IPEA/416						
International application No.	International filing da	te (day/month/year)	Priority date (day/month/year)				
PCT/JP2005/001346 31.01.20		5	23.02.2004				
International Patent Classification (IPC)	or national classification and	IPC					
C08L49/00(2006.01), C08F38/00	(2006.01),	G02F1/13(2006.01)				
Applicant Japan Science and Technology Agency							
1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.							
2. This REPORT consists of a to	tal of 4	sheets, including	ng this cover sheet.				
3. This report is also accompanie	ed by ANNEXES, comprising:						
a. (sent to the applica	ant and to the International Bu	reau) a total of 3	sheets, as follows:				
sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).							
sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.							
b. (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s))							
, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).							
4. This report contains indication	4. This report contains indications relating to the following items:						
Box No. I Basi	Box No. I Basis of the report						
Box No. II Prior	Box No. II Priority						
Box No. III Non	Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability						
Box No. IV Lack of unity of invention							
BON 110. V	Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement						
Box No. VI Cert	Box No. VI Certain documents cited						
Box No. VII Cert	Box No. VII Certain defects in the international application						
Box No. VIII Cert	Box No. VIII Certain observations on the international application						
Date of submission of the demand		Date of completion of the	his report				
Name and mailing address of the IPEA/JP		Authorized officer					
Ecosimila Na			Talankara Ma				

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2005/001346

Box	No. I	I Basis of the report					
1.		h regard to the language, this report is based on the internaticated under this item.	onal application in the language in	which it was filed, unless otherwise			
	This report is based on translations from the original language into the following ,						
			which is the language of a translation furnished for the purposes of:				
		publication of the international application (Rule 12.	international search (Rule 12.3 and 23.1(b))				
			international preliminary examination (Rule 55.2 and/or 55.3)				
2.	rece	h regard to the elements of the international application, thie eiving Office in response to an invitation under Article 14 are report):					
		the international application as originally filed/furnished					
	\bowtie	the description:					
		pages <u>1-21</u>		as originally filed/furnished			
		pages*	_ received by this Authority on				
		pages*	_ received by this Authority on				
	\boxtimes	the claims:					
		nos. 2-10, 12-15, 18		as originally filed/furnished			
		nos.*	as amended (togethe	er with any statement) under Article 19			
		nos.* _ 11, 16, 17	_ received by this Authority on	22.08.2005			
		nos.* 1	received by this Authority on	28.11.2005			
	Ш	the drawings:					
		sheets		as originally filed/furnished			
		sheets*	_ received by this Authority on				
		sheets*	_ received by this Authority on				
		a sequence listing and/or any related table(s) – see Supple	mental Box Relating to Sequence L	isting.			
3.		The amendments have resulted in the cancellation of:					
		the description, pages					
		the claims, nos.					
		the drawings, sheets/figs					
		the sequence listing (specify):					
		any table(s) related to sequence listing (specify):					
4.		This report has been established as if (some of) the amer they have been considered to go beyond the disclosure as					
		the description, pages					
		the claims, nos.					
		the drawings, sheets/figs					
		the sequence listing (specify):					
		any table(s) related to sequence listing (specify):					
*	If ite	n 4 applies, some or all of those sheets may be marked "superseded."					

International application No.	
PCT/JP2005/001346	

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement					
YES					
NO					
YES					
NO NO					
YES					
NO					

2. Citations and explanations (Rule 70.7)

This report was prepared based on document 1 below.

Document 1: WO 2001/079310 Al (Japan Science and Technology Corporation), 25 October 2001, claims; page 7, lines 13 to 18; page 19, lines 13 to 17

The inventions set forth in claims 1 to 18 are novel, involve an inventive step and are industrially applicable.

Document 1 sets forth a salt of a polyacetylene derivative obtained by polymerizing in water, an aryl acetylene derivative having a hydrophilic functional group such as a carboxyl group or a phosphono group on a side chain, in the presence of a specific catalyst and a base such as sodium hydroxide.

However, document 1 does not indicate that a support for liquid crystal is contained, or that the concentration of the polyacetylene derivative is set at 1wt% or higher in order to form liquid crystals.

Moreover, document 1 does not suggest that when constituted in such a liquid crystal state, the polyacetylene derivative has an extremely high

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/JP2005/001346

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
sensitivity as a chiral sensor, and it functions as a
highly sensitive chiral sensor using the simple method of
measuring the cycle of the spiral structure.